351.755 A1bm V.43, no. 1 1998-012

# Newsletter

December 1998

irst, we want to wish everyone a happy holiday season and be thankful for getting through the El Niño year with fully, La Niña will be as mild on Montana.

A Note From the Administrator:

relatively few problems, compared to other parts of the country. Hope-



This next year will be very challenging with several unknowns. Particularly, preparing for Y2K issues and seeing what the resulting effects of CI-75 will be. We expect these challenges to create opportunities for us to put together our skills and knowledge in an effort to find workable solutions.

#### Happy Holidays!!!

Tim Greene Administrator



STATE DOCUMENTS COLLECTION

MAR ()

MENTANA STATE LIBRARY, 1515 E. 6th AVE. HELENA, MONIANA 59620

Pat Brannon of the Department of Transportation leads his team in learning about the effects of terrorism in Montana at the 1998 Fall Training Conference in Glasgow.





STATE OF MONTANA

.....

DISASTER & EMERGENCY SERVICES 





appy Holidays! Earthquake Preparedness Month is over but that doesn't mean we can forget to take the best preparedness measures. With the recent seismic activity our state has been experiencing, it serves as a realistic reminder that we really could suffer a devastating earthquake at any time. Keep up the great work of keeping our schools, business, and homes prepared.

still a lot to add, there is currently an abundance of information available to you. To access the site directly, go to www.state.mt.us/dma/des - you can also access it through the State of Montana's Home Page at www.mt.gov. Please share your thoughts and ideas with me about this site. It is intended to be as user-friendly and informationpacked as possible. Let me know what you think.

Take care and have a safe and happy holiday season.

> Until Next Time! Monique T. Lay Newsletter Editor

Editor Notes The most important thing I have to report for this issue is that DES finally has a web site. Although there is







It's a Good Thing

and the snow around the buildings is starting to pile up. There is an 80 percent chance that the snow showers will continue throughout the day. The high school wrestling and volleyball teams have left for tournaments in towns 60 and 90 miles away in three of the town's seven school buses. The boiler at the elementary school belches black smoke, sending it throughout the building at the elementary facility, and bursts into flames. The elementary school follows the fire drill exit rules and assembles in the parking lot. All the occupants from the elementary school got out of the school without injury.

Now what? We have 300 students and teachers standing out in the parking lot, it's snowing, their source of communication is in the buildings they just evacuated and not everyone was able to grab a coat.

Unlikely scenario? I don't think so. This could happen anywhere in Montana. Are our schools prepared? Have they even thought, much less planned beyond "the parking lot"?

### Thank You!

Thank you to the following for contributing to this newsletter:

Jim Greene, Marlys Cain, Steve Knecht, Fred Naeher, Bill Thomas, Bernard K. Barton, Jolene Jacobson, Jim Kraft, and Martha Smith The majority of our population during the day in the State of Montana is in our schools and that population for the most part is under 18 years of age. We

need to be a part of planning for their safety.

A working team from the Association has, with input from OPI, the Fire Training School, teachers and other school personnel, put together a draft legislation that addresses the issue of school planning. We were told by the representative from OPI that if there is not a law requiring the schools to plan, the schools will not do it. In the long run, this law will help us to get the schools involved in our community emergency plans and exercises.

It is time to contact your local representatives and discuss this legislation with them. You will be accomplishing two things: making contact with your legislators over an issue that is for the good of the children in our state, and educating our legislators about emergency management.

This is a positive, pro-active issue for the Association to support. Isn't that what we are all about?

It's a good thing.

Martha Smith, Emergency Manager Sanders County





isaster researcher Clair Rubin, in a recent paper entitled "What Hazards and Disasters are

Likely in the 21st Century – or Sooner?" lists the following new hazards and threats:

- Events and conditions that exacerbate existing technological hazards;
- Greater, more deadly impacts of natural hazards including weather events;
- 3. Less confidence in security for physical facilities, information systems, and databases;
- 4. Human error intentional and unintentional;
- 5. Biological and chemical hazards, including biotechnology hazards and marine toxins
- 6. Terrorism;
- 7. Distant (international) sources of disasters.

Regarding telecommunications failures, for example, Dr. Rubin notes that most of the country's vastly expanding volume of paging messages are relayed around the country by a single satellite. "When it failed, close to 90% of the 45 million U.S. paging customers (including emergency managers and hospital personnel) found themselves without service" (*Washington Post*, May 21, 1998)

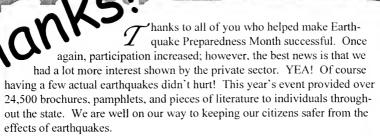
For the entire article, see website http://www.colorado.edu/hazards/wp/wp99.html#notes

Contributed By: Bill Thomas DES District I Rep

#### Visit StatesNews.....www.csg.org

Founded on the premise that the states are the best sources of insight and innovation, The Council of State Governments provides the only regional network for identifying and sharing ideas with state leaders. The Council champions excellence in all three branches of state government. The mission of StatesNews is to provide you with weekly and daily CSG and state news. Also through this site, CSG provides easy access to other member services, linking knowledge and products to technology.





Monique Lay

A very special thank you to:

Our statewide District Reps who do a great job every day.

&Paul Spengler and Bob Musselman who made gallant strides in earthquake preparedness in Lewis and Clark County.

&Alan Marble, who is making great efforts to truly focus on earthquake preparedness in Flathead County.

&Cindy Mullaney for creating an exercise which proved an effective tool for promoting earthquake awareness in Pondera County.

Wilma Puich and her ongoing efforts to educate people countywide.

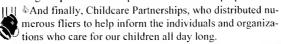
©Charlie Comer and his relentless work on Project Impact.

Dan Seitsema of Roosevelt County (non-earthquake country) for living through the largest earthquake of the year and sharing his experiences with us.

&Pat McKelvey for Jefferson County's outreach efforts following their 4.1 trembler.

#### From the private sector a big thank you goes to:

&KTVH (Channel 12 in Helena) and the Independent Record in Helena for their efforts to unite businesses throughout Lewis & Clark County and the surrounding area in promoting and educating the public in earthquake awareness and preparedness.







rong time Ravalli County Civil Defense director, Margaret Sullivan died August 28, 1998 at Stevensville. Margaret retired as Civil Defense director in 1978 having served in that capacity for eighteen years. She was 88. She helped research and write "Montana Genesis" which is a history book dealing primarily with the Bitterroot Valley. Margaret was born in Plains, Mt. and her Salish Indian friends called her "Makilee" through her lifetime.

Submitted By: Bill Thomas DES District I Rep

### Lost at Sea

ast winter, almost five million LEGO pieces were lost overboard from a freighter that was enroute from the Netherlands to New York City. A rogue wave on February 13, 1997 tilted the ship back and forth over a 100 degree arc, freeing 62 enormous shipping containers, one of which held the LEGO pieces.

The spill occurred about 20 miles from Lands End, England. On the beach near Cornwall, England, kids have found some of the seagoing LEGO toys that have washed ashore. Fittingly, most of the toy pieces belong in kits depicting ocean scenarios - scuba divers, flippers, octopuses, life rafts, etc.

Ocean current researchers
(Ebbesmeyer, 1997) estimate
that bechcombers in America may find some of

these LEGO pieces along the coasts of Florida, Georgia and

the Carolinas by the summer of 1998. Some of the LEGO pieces may travel northward through the Arctic Ocean, along the Northeast passage and south to Alaska - a journey that could take a dozen years. The currents near Alaska could route the floating toys westward to Japan, then eastward to the beaches of British Columbia, Washington, Oregon and California. The oceans of the

northern hemisphere will probably see an even distribution of the lost LEGO toys by the year 2020.

Is five million LEGO pieces a lot? Not really, when you consider that as of 1996, the Denmark based LEGO group is reported to have produced 180 billion pieces...enough for every person now on the planet to own 30 pieces! It's a good thing that not all of them are adrift!

Note: Beachcombers are encouraged to report finding drifting objects to Dr. Curtis Ebbesmeyer, 6306 21st avenue, Seattle WA, 98115. Visit the Beachcomber's Alert web site at http://www.beachcombers.org.

#### Source

Ebbesmeyer, C.C., 1997, Rogue wave grabs five million LEGO toy pieces: Beachcomber's Alert, The Beachcomber's and Oceanographer's Association, Seattle, Washington, Vol.2, no.2, pp 5-6.

Story by S. Welch



Vineteen Confederated Salish and Mootenai Tribes annual report

was an eventful, productive year for Tribal DES according to Tribal Emergency Manager Lloyd Jackson. Some accomplishments included: recertification of 46 tribal and fire department employees to Hazmat Operations level; sponsoring of the 5<sup>th</sup> annual Hazmat Conference which was attended by 126 participants; conduct of several exercises; response to 48 incidents including a large transformer fire at a substation near Hot Springs and retrieval of a scraper from Flathead Lake with assistance

from Tribal DES and Tribal divers. In addition, Lloyd Jackson spoke at a hazmat conference in Sacramento, California and traveled to Las Vegas to speak to a gathering of FEMA/DOT Region VIII representatives and Western State Tribal Disaster Service Administrators.

-- Report submitted by Jolene Jacobson, Tribal DES

ccording to the Department of Administration's Information Services

Division, Montana is expected to have statewide 9-1-1 coverage by the end of 1998. When that happens, we will join 15 other states and the District of Columbia with 100% coverage. Their latest newsletter sites these statistics:

Montana is expected to have statewide 9-1-1 coverage by the end of 1998.

15 states with 100% coverage: California, Connecticut, Delaware, Florida, Hawaii, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Oregon, Rhode Island, Texas, Utah, Washington, and Washington D.C.

14 states with 90-99% coverage: Arizona, Colorado, Illinois, Indiana, Iowa, Missouri, Montana, Nevada, New Mexico, North Dakota, Ohio, Tennessee, Wisconsin, Wyoming

8 states with 80-89.9% coverage: Alaska, Georgia, Louisiana, Michigan, North Carolina, Pennsylvania, South Carolina, Virginia



10 states with 70-79.9% coverage: Alabama, Arkansas, Idaho, Kansas, Kentucky, Mississippi, Nebraska, New York, Oklahoma, South Dakota

3 states with less than 70% coverage: West Virginia (59.13%, Maine (50%), and Vermont (48%) However, Vermont and Maine plan to implement statewide E9-1-1 systems in 1999 and 200 respectively.



#### Search & Rescue exercises dedicated as the Primary. At the Primary SARX, the Air Force sends a team to grade the exercise. A portion of this exercise is also to be set aside for disaster relief. None of the mission staff, pilots, or participating people know the scenario of the exercise except for the Wing L.O. and his trusted agents which feed information.

The search was for a downed aircraft in the Clear Water game range. The disaster relief mission turned out to be very good and realistic. To add reality to the problem, the DES duty officer, Steve Knecht, called the Mission Coordinator in Missoula and requested photos be taken of the mud slide on the Big Blackfoot River. The pictures were taken by digital cameras which are assigned to each CAP aircraft. The quality of the pictures was very good. They will get better with practice. This exercise went extremely well due

# Pach year the Montana Wing of the Civil Air Patrol is required to have one of its the Rescue exercises, dedicated as the

to DES' involvement. The evaluators thought it was an actual mission as did the crews until the L.O. advised differently.

This type of damage assessment is available to all counties. If you are interested in how to get this resource for an actual disaster damage assessment, contact me. By the way, the Wing got a grade of excellent and I got some good pictures of the mud slide.



Bernard K Barton Powell County DEM Director Emergency Service Montana Wing CAP

Is Anyone Interested in the

ecently, a group of researchers decided to see if there was any current interest in a topic they first discussed two decades ago: the jokes and humor that circulate during disasters. This focus has Popular Culture of Disasters? now broadened to, for want of a better term, the "Popular Culture of Disasters." Tentatively, this includes disaster

jokes and humor, board games and puzzles with disaster themes, folk legends and beliefs about disasters (including Great Flood myths), disaster calendars, songs and poems created at times of disaster, nontraditional predictions (such as the Browning earthquake prediction in 1990), disaster novels and films as well as spoofs of them (e.g. the "Airplane" series), anniversary newspaper issues, on-site graffiti and survivor buttons, certain common photos and video tapes, memorial services, cartoons and comic strips with disaster themes. World Wide Web chat rooms developed around disaster occasions, etc. This is only a partial list, but it conveys what might be considered under the general rubric of the popular culture of disaster. As an intellectual rationale for this project, it can be argued that humor is a powerful coping mechanism, and that popular culture may be the major way most people learn about disasters.

The group focusing on the topic has concluded that disaster popular culture is a worthwhile topic for more systematic exploration (given the limited publications and information of the phenomena mentioned above), and they are seeking others who might be interested in, or knowledgeable about, this topic. The group is currently considering next steps in furthering their interests - including establishing an Internet discussion group and Web site, developing a special issue for a disaster journal, and hosting relevant sessions at professional meetings.

Anyone having an interest, suggestions, contributions, and/or writings on this topic, or who simply wants to be informed of developments, is encouraged to contact E.L. (Henry)Ouarantelli, Disaster Research Center, University of Delaware, Newark, DE 19716; (302) 831-6618; fax: (302) 831-2091; e-mail: elqdrc(a udel.edu.

> Passed on from the November 1998 Edition of the Natural Hazards Observer (Volume XXIII, Number 2)



n the last newsletter, we listed principles of good preparedness planning. In the next ten newsletters, we'll summarize ten criteria for good disaster management. The criteria will be summaries of the principles described in the 1996 article "Ten Criteria for Evaluating the Management of Community Disasters" by E. L. Quarantelli, co-director of the Disaster Research Center at the University of Delaware. This brief article will simply list the criteria; future articles will explain them.

#### Good disaster management must:

- 1 Recognize correctly the difference between agent (i.e., disaster) and response generated needs.
- 2 Carry out generic functions in an adequate way.
- 3 Mobilize personnel and resources in an effective manner
- 4 Involve a proper task delegation and division of labor.
- 5 Allow the adequate processing of information.
- 6 Permit the proper exercise of decision making.
- 7 Focus on the development of overall coordination.
- 8 Blend emergency aspects with established ones.
- 9 Provide the mass communication system with appropriate information
- 10 Have a well-functioning Emergency Operations Center (EOC)

Contributed By:
Bill Thomas
DES District I Representative

PDS

ongratulations to:

Dan McGowan Helena Conradsen Wilma Puich



for their completion of the Professional Development Series. For more information on the PDS, please see the State DES Training Catalog, or contact Fred Nacher at 841-3968.





forgotten your computer password?
Do you have difficulties coming up with something to use that is more complicated than the obvious, such as your name or address? Here are a few tips and ideas from ISD's September 1998 edition of News & Views, written by Lynne Pizzini.

\*Passwords should not be written down where they can be found by unauthorized personnel and should not be shared with other individuals.

\*Passwords should not be obvious or easily guessed (userID, user name, address, birth date, child's name, spouse's name).

Here are a few tips for creating passwords that you can remember:

 Create a phonetic sentence using the pronounced sounds of the letters, numbers, or special characters.

H0D24GET I tend to forget.

I87#2DAY I ate seven pounds today.

Concatenate short, unrelated words and add a number to it somewhere.

GO6CAT2SAY

BLACK7AND

Use the first letter of each word in a poem or song until you have enough letters and add a number or substitute a number for a letter.

JAJ4WUTH Jack and Jill went up the hill. HINSNJA Help! I need somebody.

Not Just anybody.

Mirror a work (in either direction); repeat process or truncate letters as needed to get appropriate length and add a number to it somewhere.

> JUST5TSUJ BOY7YOB7BOY

Take a word from the dictionary that is long enough to qualify as a password. Replace all the vowels with numbers or special characters.

M\$RN\$NGS Mornings PS1CH1T1C Psychotic

# A NEW WAY TO TUNE IN \$

You can now watch EENET on your computer! Many broadcasts are available via the Internet. For the many public safety personnel who do not have access to satellite downlink sites, this may be a great alternative. For details, visit the EENET web page at:

www.fema.gov/emi/eenet.htm

# Correction to: EMI Schedule of Courses Brochure

The wrong application was attached to the EMI schedule that was sent out early in July. A new revised schedule has been printed (revised 7/98 in the upper left-hand corner) with the correct FEMA Form 75-5, General Admissions application, and is currently being distributed. Please destroy all copies of the first schedule. If anyone submits the short form (FEMA Form 75-5A), their application will be returned.



### **Practice Makes Perfect!**



The Weapons of Mass Destruction Exercise held at Fort Harrison on August 28, 1998 provided some valuable information to the participants.

#### DON'T CHEAT BY SCROLLING DOWN FIRST!!!

It only takes 30 seconds. Get out your calculators...

>>> Work this out as you read but DO NOT refer to the bottom until you have done the calculations!!! Follow these six steps and this will amaze you...

Just for Fun

1748

1. First of all, pick the number of days a week that you would like to go out (or eat pizza, whatever).

12



. . . . . . .

4. Multiply it by 50.



• 6. Last step: Subtract the four digit year that you were born.

#### SEE BELOW FOR RESULTS:

>You should now have a three digit number:

- >The first digit of this was your original number (i.e. how many times you want to go out each week).
- >The second two digits are your age!!!
- >This is the only year (1998) it will ever work, so spread the fun around by mailing this to your pals.



#### New Points of Contact

Roger Running Crane is the new point-of-contact for the Blackfeet Nation, he is replacing Gabe Grant.

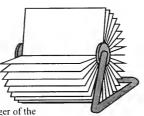
Roger Running Crane Blackfeet Tribal Business Council Vice Chairman P.O. Box 850 Browning MT 59417

Browning, MT 59417 e-mail btbc@3rivers.net (406) 338-7179 office (406) 338-7530 fax

Fred Vanhorn

GNPS has not appointed a chief ranger of the east side of Glacier Park. Fred Vanhorn is currently the point-of-contact.

Protection Specialist Glacier National Park P.O. Box 128 West Glacier, MT 59936 e-mail Fred\_Vanhorn@NPS.GOV (406) 888-7822 office (406) 888-7808 fax For all of you who may stop by to see Pat Hansen in Sweet Grace County, his office has now officially moved to the Old Hospital Bound at 5th and Hooper Street in Big Timber. All his information remains the same except you can now find him at his new place of busins





Visit our new DES Web Site

www.state.mt.us/dma/des

#### e-mail Updates:

#### Richland County

 $Butch\ Renders\ .....\ Butch\_Renders @msulink.montana.edu$ 

#### Gallatin County

Mike Hoey ..... scaptain@bozeman.net

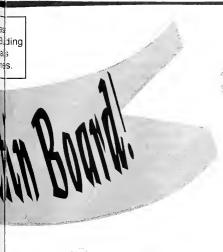
#### **Dawson County**

Helen Conradsen......dawcodes@midrivers.com

New State Office Domain .....@state.mt.us Individual addresses will remain the same but the domain will change. *Example:* mlay@mt.gov is now mlay@state.mt.us - The old addresses will remain operable for an undetermined amount of time.

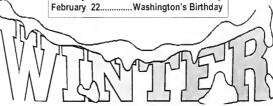
Merr Uhri







Hanukkah
First Day of Winter
Christmas
New Year's Eve
New Year's Day
Martin Luther King, Jr.
Lincoln's Birthday
Valentine's Day
President's Day
.Washington's Birthday





DECEMBER

#### District VI Update

Mark Gruener Business Phone: 538-6166

#### **County Updates**

#### Blaine County:

New Deputy: Michael W. Woolridge

BUS: 265-0355

CELLULAR: 265-0870

FAX: 265-0356

#### Wibaux County.

Frank Datta:

24 HOUR: 796-2222

FAX: 796-2218

#### Dawson County:

Helen Conradsen

Business Phone: 377-2566

FAX: 377-2022

#### Cascade County:

New Deputy Coordinator Ryan "Buck" Burke

P.O. Box 458

Great Falls, MT 59403

Cellular: 788-3871



### Seismic Design and the Murrah Building

From the MCEER News:

ccording to an article in the July 1998 issue of ASCE News, W. Gene Corley, testified in June on behalf of the American Society of Civil Engineers (ASCE) before the public buildings and economic development subcommittee of the House Committee on Transportation and Infrastructure. In the testimony, Corley asserted that "[i]f the [Murrah] building, constructed in 1976, had been built using today's seismic building details, as much as 50% to 80% of the structural damage could have been prevented, thus saving many lives." Corley went on to say that a majority of the fatalities were caused not by the force of the bomb blast itself, but by the progressive collapse of the building's floors, which depended on the support of a few key columns that the bomb destroyed." Corley advised that seismic design details, such as special moment frames or dual systems, could build redundancy and toughness into the design. Consequently if some supports are damaged by a blast, other supporting mechanisms could carry most of the loads. Finally, according to Corley, "[i]f we use some of today's seismic building design details on new federal or other office buildings, we can reduce much of the damage and potentially save a lot of lives. And it will only add 1% to 2% more to the total cost of the structure."

"filf the [Murrah] building. constructed in 1976, had been built using today's seismic building details, as much as 50% to 80% of the structural damage could have been prevented....

A joint ASCE/FEMA publication, The Oklahoma Bombing: Improving Building Performance Through Multi-Hazard Mitigation (1996) makes recommendations for designing new buildings and retrofitting existing ones based on methods to mitigate wind and earthquake damage. This publication is available at no charge from:



Box 2012

8231 Stayton Drive Jessup, MD 20794

Telephone: 800-480-2520 or 202-646-3484

Fax: 301-497-6378

Contributed by Jim Greene Provided by WSSPC





Check out this web site for current earthquake information in Montana.



http://quake.wr.usgs.gov/QUAKES/CURRENT/montana.html



### 4

#### FEMA Disaster Preparedness Library Online and on CD-ROM

#### From the MCEER News:

istration (NOAA).

he FEMA web site at <a href="http://www.fema.gov">http://www.fema.gov</a> contains a virtual library of disaster preparedness materials, including brochures, fact sheets, activity guides, and other resources for educating the public about disaster preparedness and mitigation. The library contains materials on floods, earthquakes, hurricanes, winter storms, wildland fires, and other disasters. Many of the materials are co-produced by the American Red Cross and the National Oceanic and Atmospheric Admin-

What's new is the FEMA Disaster Preparedness & Mitigation Library on CD-ROM. This CD-ROM library contains ready-to-print materials on multiple hazards, disaster preparedness, mitigation, and response and recovery, as well as new brochures on how to reduce financial hardships caused by disasters. In addition, it contains planning guidance for businesses and manufacturers, and FEMA's Good Ideas Book, which includes activities, case studies, and resources for educating children, homeowners, and others. This CD-ROM is specifically designed for disaster educators who provide information about multiple hazards and who want to produce high-quality educational materials at a professional print shop. Those wishing single copies of these materials can obtain them from the FEMA web site, as listed above.

In the United States and Canada, the FEMA Disaster Preparedness & Mitigation Library on CD-ROM can be obtained free of charge from:

FEMA Publication Distribution Center PO Box 2012, 8231 Stayton Drive

Jessup, MD 20794-2012 Telephone: 800-480-2520

Fax: 301-497-6378



International users can place written requests for the FEMA Disaster Preparedness & Mitigation Library on CD-ROM from:

Ralph Swisher
Program Manager
Community & Family Preparedness Program
Attention: Publications Requests
FEMA
500 C Street, SW
Washington, DC 20472
E-mail: ralph.swisher@fema.gov

Again, there is no cost for these materials, whether sent to domestic or international addresses.

Submitted By: Jim Greene Provided By: WSSPC





s the Millenium Bug continues to cause concern, we have compiled some information to help you become familiar with and work with

this problem. If you do not have access to the internet, please contact our office and we will provide you with some hard copy information. In addition, the DES Advisory Committee will meet on December 15 and will include Y2K as part of their discussion. A workshop will also be included at our next Governor's Conference. It is tentatively scheduled for Thursday morning.

### To Do List:

#### Computers:

Run a diagnostic program on your home computers to make sure they are Y2K compliant. Diagnostic programs are available at computer stores or for download at:

- The Federal Reserve Board
- www.bog.frb.fed.us/y2k/pctesting.htm
  National Software Lab
- www.nstl.com/html/ymark\_2000.html
- Viasoft onmark.viasoft.com

#### Software:

Check with manufacturers of frequently used software programs to find out whether they are Y2K compliant.

#### **Operating systems:**

- Windows 98 is compliant, but Windows 95 and Windows 3.1 are not. (Patches can be downloaded from Microsoft's Website to fix the problems). www.microsoft.com/y2k
- Apple says all of its computers made since 1984 are fully Y2K compliant.

www.aple.com/macos/info/222.html

#### Web browsers:

- Netscape Communicator 4.0 and beyond are fully compliant; so are Netscape Navigator 2.02 & 3.0.
- Microsoft Internet Explorer 4.0 for Windows and Macintosh are fully compliant. Internet Explorer 3.0 for Windows has some minor problems. Internet Explorer. 3.0 for Macintosh is still testing; compliance uncertain.

#### Other popular software:

Intuit, makers of the popular financial software, Quicken. www.intuit.com/support/year2000

Norton, maker of utilities and antivirus programs. www.symantec.com/y2k/y2k.html

#### **Financial preparations:**

- Make backup paper records of all your financial dealings. Include payment records for credit cards, bills and loans.
- Have enough travelers checks or cash on hand to get you through a long weekend, more if you feel concerned your bank may not be year 2000 compliant.

#### Automated home systems with embedded chips:

Check with manufacturers of garage doors, elevators, heaters and coolers. Find out whether they include calendar systems and, if so, whether they are Y2K compliant

#### Home medical devices:

Ask your doctor. Insist on an answer. (Note: Items such as heart monitors, pacemakers and infusion pumps do not have calendar functions, but computers that collect information from them might not be compliant.)

#### Emergency kit:

Put together a kit containing flashlights (with fresh batteries), food that doesn't need to be heated, and enough bottled water to get you through a few days, just in case the power in your area temporarily goes out.

#### Misc. Web sites for more information:

http://www.wa.gov/dis/2000/links/menu1.htm

A great site which will link you to a vast culmination of Y2K info. You should be able to find anything here.

#### www.fema.gov/library/y2k1002.htm

FEMA's involvement with Y2K is growing and this site will provide you with the information they have regarding the issue.

#### www.emassociation.org/

Provides information targeted to the local emergency manager. It includes checklists, plans and other useful tips. This site is updated frequently.

(Continued on page 1")





# Independent Study Courses

The following Independent Study courses will soon be available for distribution through our state office:

IS-11 Animals in Disaster

IS-195 Basic Incident Command

IS-279 Retrofitting Flood Prone Structures

IS-393 Introduction to Mitigation

We currently have on hand for "same day" mailing:

IS-1 Emergency Program Manager

IS-2 Emergency Preparedness, USA

IS-5 Hazardous Materials: A Citizen's Guide

IS-7 A Citizen's Guide to Disaster Assistance

IS-8 Building for the Earthquakes of Tomorrow

IS-120 An Orientation to Community Disaster Exercises

IS-195 Basic Incident Command Course

IS-275 The Role of the EOC in Community Preparedness, Response & Recovery

For all Independent Study Courses, listed above or not listed, you can apply directly to EMI using the brochures that were mailed out to all DES Coordinators/Emergency Managers.

(Continued from page 16)

#### www.erols.com/steve451/impact.htm

Another great site for emergency managers and various public safety people. Information includes planning, preparedness, the threat from embedded systems, and a host of other topics.

#### www.v2k.com

This site addresses Y2K legal issues as well as the management issues that may result from the Y2K problem. http://y2k.ci.lubbock.tx.us/y2k.htm Handy tips and ideas for the emergency manager.







# Disaster Awareness Month

Throughout the month of October, Yellowstone County and the Red Cross coordinated three weeks of activities, recognizing October as Disaster Awareness Month. Lead by the efforts of Jim Kraft, the event was successful and a positive opportunity to educate the citizens of his county. The following press release went out to begin the multitude of events planned throughout the month. Great job, Jim!

#### Statement and Awareness

Disaster can strike quickly and without warning. With the continuing rise in local and world disasters, it is crucial that we be prepared for such an event. Even true emergencies can be modified by good planning and preparation.

#### Disasters Happen...Are You Prepared?

Join us in a community-based event sponsored by the Midland Empire Chapter of the American Red Cross, its eight -county jurisdiction\* and the Local Emergency Planning Committee of Yellowstone County\*\* in designating OCTOBER as "DISASTER AWARENESS MONTH".

### Local Emergency Planning Committee of Yellowstone County (LEPC) Purpose and Objectives

To serve as a forum for exchange of information and experience relating to emergency planning and community right-to-know. To promote and provide positive relationships among industry, private, and government sector resources to mitigate, prepared, respond and recover from all emergencies and disasters that can occur in Yellowstone County.

#### The Mission of the American Red Cross

The American Red Cross, a Humanitarian Organization led by volunteers and guided by its Congressional Charter and the fundamental principles of the International Red Cross Movement, will provide relief to victims of disaster and help people prevent, prepare for, and respond to emergencies.

**Weekly events will include:** Fire Prevention Week, "The Great Escape" Contest, National Winter Weather Awareness Week, Emergency Siren Test, Yellowstone County Tabletop Exercise, Mock Disaster Exercise, Disaster Awareness and Family Emergency Preparedness Exp., and Community Awareness Evaluation.

\*Yellowstone, Carbon, Musselshell, Big Horn, Treasure, Rosebud, Stillwater, and Golden Valley County DES Coordinators

\*\*American Red Cross, Yellowstone County DES, American Medical REsponse, Deaconess, St. Vincent, Fire Departments, Police and Sheriff Departments, National Weather Service, Exxon, Cenex, Schools, Montana Department of Transportation, Montana Safety Services Council, Montana Search and Rescue, and Yellowstone Radio Club.





Psychological First Aid fter a traumatic event, disaster, or will likely be your own employees. Teach outside influences and exposures: your employees how to provide effective, immediate support.

Immediately protect employees from additional trauma and stress (dangerous areas, witness rescue of injured persons, media intrusion, etc.). Shelter them from seeing dead or injured persons being removed.

critical "incident," your first respon- Direct employees to secured areas away from

- Identify a place to have appropriate employees congregate.
- Smaller rooms feel safer than large, open
- Monitor doorways to ensure unwanted outsiders don't enter, e.g. media, attorneys.

Make contact with victims, witnesses and others experiencing traumatic stress (dazed, confused, shocked, stunned, crying, hyperactive, shaking, or visibly upset).



#### TELL THEM

- "You are safe now."
- "It is over."
- "You survived."
- "You're experiencing a traumatic stress reaction." "It's O.K., let it flow."

#### ASK THEM

- "How were you involved in the incident?" What did you see? Hear? Experience?"
- "Are you injured in any way?"
- "What do you need?"
- "What can I do to help you?"

Touching is typically helpful - but it must be natural and appropriate.

Assist them with issues of immediate concern, such as a drink of water, a blanket, an offer to retrieve personal items or contact a spouse or other family member.

Give them information about what happened they desperately need the facts:

- -Dispel rumors or misunderstandings.
- -Be forthcoming, but be careful not to give information that will increase anxiety.

#### Assessment

having now?"

Ask "How were you involved in the incident?"

Ask, "are you aware of anyone who is more significantly affected than others?" Then ask, "What kind of reactions are you

#### If Adequately functioning:

Enlist them to assess others and direct these people to safety.

Ask that a list of "at risk" individuals be conveved to you.

Have them stay with persons needing constant comforting.



Written by Dan Paulk Excerpted from the 1998 Edition of the Disaster Resource Guide



# Richter Vs. Mer

Richter Vs. Mercalli
Which is Better?

BOTH! The most common request I have received this year regarding earthquakes has been to explain the difference between the Richter Scale and the Modified Mercalli Scale. If you have always wanted to

know the difference and didn't, here it is. If you never knew there was a difference, you've just received yet another bit of knowledge to add to your already vast brilliance. The easiest way to remember the difference: The Modified Mercalli Scale is tangible, the measurements can be made simply by viewing the effects of the earthquake. Anyone can do this. The Richter Scale is a formula that measures the the amount of energy released by the earthquake. This must be done by a seismograph. Both scales are equally important and provide significant information; however, there is no correlation between the numbers in either scale. For a better comparison, the actual scales are included for you on the next page.

#### The Mercalli Scale: A Measure of Intensity

Earthquake intensity is a measure of the effects of an earthquake at a particular place. Intensity is determined from observations of an earthquake's effects on people, structures, and the Earth's surface. A ten-value intensity scale which had been in use in Europe since 1883 was refined in 1902 by an Italian seismologist, Giuseepe Mercalli. The Mercalli scale we use today is a modification of Mercalli's twelve-value scale developed by two Americans, H.O. Wood and Frank Neumann, in 1931. The scale uses Roman numerals from I to XII to rank relative levels of destruction, ground motion, and human impact.

The Intensity (or impact) of an earthquake in a given area will depend on the type of geological structures in the area as well as the type of buildings. Houses built on rock, for example, will receive less damage than houses built on sediments the same distance from a quake's epicenter. Poorly built houses will receive more damage than those that have been reinforced to withstand earthquakes. In general, though, the further a site is from the earthquake's focus, the lower the amount of damage it will sustain.

#### The Richter Scale: A Measure of Magnitude

Another method of rating the size of earthquakes is by using scientific instruments to measure the amplitude of body waves and surface waves recorded on seismograms. The amplitude is the height of the wave tracing above the center line on the seismogram. The instrument's reading indicates the amount of strain energy released by an earthquake. This measure is called the earthquake's magnitude. The greater the wave amplitude, the greater the magnitude.

A magnitude scale was devised by the American seismologist Charles Richter in 1935. It uses Arabic numerals. Richter's scale is logarithmic and open-ended; that is, there is no upper or lower limit to Richter magnitudes. Each whole-number increase in the magnitude of an earthquake represents about a thirty-fold increase in the amount of energy released.

The original Richter magnitude scale was devised to measure earthquakes in southern California. Later, however, Richter and his colleague Beno Gutenberg devised a scale to measure distant earthquakes. This scale is based on the amplitudes of surface waves. Body waves from distant earthquakes can also be used to determine magnitude.

#### **Modified Mercalli Scale:**

- I People do not feel any Earth movement. VI Everyone feels movement.
- II A few people might notice movement if they are at rest and/or on the upper floors of tall buildings.
- III Many people indoors feel movement. Hanging objects swing back and forth. People outdoors might not realize that an earthquake is occurring.
- IV Most people indoors feel movement.
   Hanging objects swing.
   Dishes, windows, and doors rattle.
   The earthquake feels like a heavy truck hitting the walls.

A few people outdoors may feel movement.

Parked cars rock.

V Almost everyone feels movement.
 Sleeping people are awakened.
 Doors swing open or close.
 Dishes are broken.
 Pictures on walls move.
 Small objects move or are turned over.
 Trees might shake.

Liquids may spill out of open containers.

Richter Magnitude

People heas movement.
People have trouble walking.
Objects fall from shelves.
Pictures fall off walls.
Furniture moves.
Plaster in walls might crack.
Trees and bushes shake.

Trees and bushes shake.

Damage is slight in poorly built buildings.

No structure damage.

VII People have difficulty standing.
Drivers feel their cars shaking.
Some furniture breaks.
Loose bricks fall from buildings.
Damage is slight to moderate in well-built

buildings, considerable in poorly built buildings.

VIIIDrivers have trouble steering.

Houses that are not bolted down might shift on their foundations.

Tall structures such as towers and chimneys might twist and fall.

Well built structures suffer slight dam-

age.

Poorly built structures suffer severe

damage.

Tree branches break.
Hillsides might crack if the ground is wet.
Water level in wells might change.

XI Well built buildings suffer considerable damage.

Houses that are not bolted down move off their foundations.

Some underground pipes are broken. The ground cracks.

Reservoirs suffer serious damage.

X Most buildings and their foundations are destroyed.

Some bridges are destroyed. Dams are seriously damaged. Large landslides occur.

Water is thrown on the banks of canals, rivers, lakes.

The ground cracks in large areas. Railroad tracks are bent slightly.

- XI Most buildings collapse.

  Some bridges are destroyed.

  Large cracks appear in the ground.

  Underground pipelines are destroyed.

  Railroad tracks are badly bent.
- XII Almost everything is destroyed.

  Objects are thrown into the air.

  The ground moves in waves or ripples.

  Large amounts of rock may move.

Example

#### The Richter Scale:

Smatt blast at construction site	6 ounces	1.0
	2 pounds	1.5
	13 pounds	2.0
	63 pounds	2.5
	397 pounds	3.0
	1,000 pounds	3.5
Small Atomic Bomb	6 tons	4.0
Average Tornado	32 tons	4.5
	199 tons	5.0
Massena, NY Quake, 1944	500 tons	5.5
	6,270 tons	6.0
Coalinga, CA Quake, 1983	31,550 tons	6.5
	199,000 tons	7.0
Hebgen Lake, MT Quake, 1959	1,000,000 tons	7.5
San Francisco, CA Quake, 1906	6,270,000 tons	8.0
Anchorage, AK Quake, 1964	31,550,000 tons	8.5
	199,999,000 tons	9.0

TNT Energy Equivalent





#### The More You Know...?



Our brilliant DES Coordinators gaining even more knowledge at the 1998 Fall Training Conference in Glasgow, Montana.

If you are tempted by the convenience and prices of Websites selling books, electronics, travel and so on,

but you are leery of being scammed, the Council of Better Business Bureaus wants to reassure you. Its Web site, www.bbbonline.org lists more than 1,000 Web merchants who have pledged to operate ethically and whose customers haven't reported unresolved complaints to the Council. You can search for vendors by category of merchandise or by the name of a merchant.

Taken from the September 1998 Edition of Retire with Money



Visit Our New Web Site 
www.state.mt.us/dma/des

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\*\*\*\*

It's not too late for next time.

Voter registration on line:

www.netvote98.mci.com







The following questionnaire was designed for the customers of the DES Duty Officers. If you have recently, or in the past, had the opportunity to work with the State DES Duty Officer, please complete the form and return it to the State Office. The information will be used to evaluate the quality of our customer service and help us to implement necessary changes to improve our program. If you wish to remain anonymous, that is fine; however, it would be helpful to know who you are in the event we need to clarify any comments you have provided. As with all of our information requests, you are assured of your privacy! This questionnaire will only be used to help improve the State DES Duty Officer Program. Thank you in advance for your help.

#### Please respond to the following questions:

Was the D.O. responsive and knowledgeable?

Did the D.O. service help to resolve the situation?

Was there adequate follow up to ensure the information and service was accurate?

■ Were there any problems in contacting the duty officer?

Did you experience any frustrations that we could work on to resolve?

Do you have any suggestions or comments that would help us improve the duty officer program?

Namei		
1-7-1	•	 

Crty, States

Phone Number: 2 ( )

e-mail Addressi

Other:

Please return to: Steve Knecht, Response Manager Disaster and Emergency Services 1100 North Main P.O. Box 4789 Helena, Montana 59004-4789

OR e-mail to: sknecht@state.mt.us

Questions? Call Steve at 22 (406) 841-3961



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Disaster & Emergency Services Division P.O. Box 4789 1100 North Main Helena, Montana 59604-4789

**≖**(406) 841-3911

fax (406) 841-3965





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1100 North Main

P.O. Box 4789

Helena, Montana 59604-4789

**2**(406) 841-3963 **3**(406) 841-3965

₽mlay@state.mt.us

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